

Graduation proposal: Giving an Experience of Technology

I want to enable the audience to see or experience consequences of technology upon ordinary life, because I think everybody has the right to know how technology can shape our reality. To do this I use a process that I call embodiment and I also create tools that allow for a new kind of interaction with or view upon information.

Previous practice

Free is Too Cheap

Free is Too Cheap is a browser add-on. A browser add-on is computer code that gets executed after the browser is ready with loading a webpage. Users need to install a browser add-on for the code to have an effect. My add-on added a new section to every website which would fill half the screen. Everytime an user go's to a website where Google makes use of the hard drive of the user. My section will inform the user that he/she has made money because Google is paying rent for using the users hard drive. About 80% of the websites will tell the user that money is earned if the add-on is installed. In reality no money gets transferred.

If I want to use an office for a business I have to pay rent to the owner of the building where that office is located. When Google makes money by selling targeted advertisements it makes use of my hard drive. It would be impossible for Google to “target” me if they didn't store a file with a digital identity on my hard disk. I think it's unfair that Google does not have to pay rent when it makes use of my property when I go on the Internet, while I pay for the things I use. With Free is Too Cheap I wanted to raise awareness for this.

To do this I created a fake message, that seems to come from Google, which would inform you that you make money out of the Google Union. This Union claims that it takes care of your interests and transfers money every time Google makes use of your hard drive.

Into the Deep

Into the Deep is a performance where I mimic the movements of a virtual human like figure, who was taught to walk by a computer program. On a daily basis at 4pm, in a shopping street in Rotterdam, I performed these walking movements that look unnatural. The performance would be in the middle of the shopping crowd and last for 15 minutes. Afterwards I would go inside the gallery and have a conversation with the audience. This conversation would start with me asking questions about what the audience has seen, felt and thought while experiencing the performance. Later I would tell them what the inspiration for my movements were and we would discuss the nature of the computer program that had taught a 3D model how to “walk”.



Nowadays the virtual world of the computer merges more and more with the physical space. When technologies are brought into the public space, forming a hybrid area, we lose perception of its working and the technology “just works”. Technology however functions completely different from before, when they get so integrated in daily life that even children of the age of two can work with them. A lot of functionality gets lost when interfaces become seamlessly! I think it is important to stay aware of the functioning of computer systems around us and remember that there are alternative ways to interface with these systems, ways that may prove very fruitful for any digital native.

By putting the output of a computer program into the real world, through acting out the movements, I create a space for discourse about the functioning of the computer system and the functioning of the people who share the space with that program during the performance. Movements taught by a computer form a stark contrast with natural movements and by discussing this afterwards people may get an idea how a computer can teach anything and which alternative interfaces must be in existence for such a process. Since the program I chose is failing we can suspect that somewhere the designers have made an error in their thinking about what it means to learn and/or grow. The propositions and ideologies that are entwined with the computer program can be questioned as well in a discussion among the audience and myself. At the same time the performance triggers a discussion about the shopping audience; how they may relate to the technology, how they deal with things they don't know in general or how the mechanics in the city are already shaping their go abouts.

Project description

My project will consist of between seven and ten smaller projects that together form a whole. I want to do multiple smaller projects because I want my graduation project to reflect my broad practice and skills. In the project there will be two phases. In the first phase I'll try to gather an audience and in the second phase I want to stimulate them to organize themselves. Both phases may not reach the targets I'm aiming for, but this in itself will be a result. Next to these two phases there are ideas that don't directly fit in one of the two phases, but which do relate to the theme. I consider these projects extra possibilities that I may or may not do.

PHASE 1: GATHERING A CROWD

Performance 1: embodiment of online advertising technologies

My first subproject will be a performance in public space. I will act out in a physical space what online advertisement companies like Google and Facebook are doing in the virtual realm. I may for instance pretend to be a worker of the company that rents out the billboards at the bus stops. In that role I could write down how many people have looked at the advertisements and maybe I'll ask questions about their sex for background information. Stalking people in shopping streets is another action in real life which Google and Facebook are doing online.

Performance 2: viral video demanding part of online advertisement surplus value

My second subproject will be a music video for a cover of “should I stay or should I go now” by The Clash. The lyrics will be about how online advertisers are making money by using our personal hard drives, but that we don't get any money from these companies while they should pay rent, because our hard disks are our property. The “slogan” of the clip will be “I want money for those cookies”. Cookies are files that are part of the advertisement technology used by Facebook and Google, but which reside on your hard disk. Imagery for the video clip may consist of how people reacted to Performance 1. For instance the public could have had a fright when I suddenly come up very close when “tracking” them

or they may investigate when they see two eyes carved out of a billboard poster. Probably I'll mix this material with images of the band playing and I could use green screen technology to carve video material out and make a collage with different sources. It's also possible that I'll be substituting the commercial images in the video with embodied "tracking technology".

Website 1: phishing Youtube and/or Facebook

Next I will make a fake Youtube and or Facebook site. The video clip which is the result of Performance 2 will be published on this site. However as you watch the video things will happen to the site which will probably strike you as being odd. For instance when commercials in the video are replaced with something; the commercials on the site will be replaced with similar material. This material could be the persona from Performance 1 which was tracking the shopping audience, who is making gestures that suggest he is following the audience as well. At the end of the video you are invited to go to Website 2.

Website 2: shouting contest

The second website will give some background information for people who are interested and want to read about the project, but this is not the main functionality. Website 2 is a contest website. Part of the lyrics of Performance 2 is: "You never get any pay out. So come on everybody shout. I want money for those cookies!". On Website 2 the audience is invited to shout for their money and participate in the shouting contest. The audience should be able to record a shout through their webcam and then upload the material. This material will then be feeded into Website 1. The listing of videos on the right side of Youtube could for instance be replaced with this material right after the band is singing "So come on everybody shout". In a similar manner all friends of the viewer could be replaced with people screaming if I decide to phise Facebook. Of course the best screamer will win a price, but with this particular contest everybody will win if I can afford that many prices described in the next subproject.

PHASE 2: PROMOTING SELF-ORGANISATION

Hardware 1: the price

The price for the contest on Website 2 will consist of a Cookie Monster doll that we know from our favorite educational program Sesamestreet. However some hardware will be hidden inside it. I'm not entirely sure how you can interact with the hardware inside the doll, but it would make sense if the internet from the big bad world should go into his mouth and that the wire coming out of his butt should go into your computer. The idea is that Cookie Monster will eat the cookies which are planted upon your hard disk. Remember that cookies are files that get installed on YOUR computer by Google, Facebook and other companies in order for THEM to make money. With the Cookie Monster installed it will be impossible for them to install cookies (since they get eaten) unless they pay you (read Software 1 for more on this). I could swap the eyeballs of the doll with displays, which will indicate how much money you made.

Workshop 1: do it yourself Cookie Monster

When as many as possible people have received a price there will be the opportunity to make the Cookie Monster hardware yourself. I could also make an instruction video how to do this. In the workshop I could start a conversation about the background of this project, like why I think it is important, how cookies and the internet work and what choices we have concerning our privacy. To support this talk I may play theatrical games that embody the working of cookie technology and the politics of consumer/producer relations. In order not to force people to use the Cookie Monster I may explain other tools that are already there and not mine like: Cookie Monster plugin, Ad Block Plus, Ghostery and Chromes cookie handling mechanism.

Software 1: cookie union

When many people use the Cookie Monster hardware it hopefully becomes a concern to online advertisement companies that people are deleting their cookies. This would be an opportunity to talk about how much they are willing to pay for the cookies to be installed. I guess that this will not be a lot of money per person, but with all Cookie Monsters together it may be enough to invest in a charity or making the internet more green. As soon as an agreement is made a server should indicate to all Cookie Monsters which cookies are allowed to pass.

EXTRA POSSIBILITIES

Software 2: automated cookie video collage

This project is a collage of videos on internet about what cookies are and where they are good for. The composition of these videos can be automatically adjusted according to certain parameters. I could for instance make the videos from companies who make the biggest profit more visible then videos coming from less successful companies. Another possibility is looking at the popularity of these videos and make the unpopular ones the biggest.

Website 3: visualization of cookies

When somebody visits this website it should give a clue about how many cookies are present on the computer of the visitor. It could also visualize data from these cookies like how long they are on the system, when they are planned to be removed (could be in years) and maybe the personal number stored in the file or any other data present. The video collage as described in Software 2 could be a possibility.

Website 4: meta data of the Dutch cookie law

This website lets you see who in the Dutch parliament voted what when the cookie legislation was passed, that was made to improve the privacy of the public. Not only do I want to publicize this information, but preferably I would like to map which lobby has influenced which senator. This way a narrative of intertwining and conflicting interests gets told where you normally do not get a clear picture off. It may be the case that interesting cookie legislation is voted upon soon in Europe and then it can be interesting to see if I can use the public database of European Union law in a similar way.

Project motivation

My motivation for this project is similar to my motivation for “Free is Too Cheap”. In fact “Free is Too Cheap” is the simplified version of the project I propose now.

It's impossible to observe the actions that a computer is taking from the outside. Often this is a good thing, because it allows a computer to work at a speed and scale that is impossible for a human to do. Unfortunately it can also be a bad thing, because the computer may take actions unnoticed, that an user doesn't want it to take. An example where computers take opaque decisions that may be an exploitation of the user is cookie technology.

If you want to use an office for a business you have to pay rent to the owner of the building where that office is located. When online advertisement companies make money by selling targeted advertisements they make use of your hard drive through a technology called “cookies”. It would be impossible for them to “target” you, due to the nature of the Web, if they didn't store a file with a digital identity on your hard disk. It's unfair to make you pay for things you use, that are not your property,

while others don't pay anything when they use your property. By navigating the Web while allowing cookie technology, a user generates data that can be sold with a big profit in advertising. This is a concept that is hard to grasp, but it's important to understand because people may get exploited without realizing it. My project aims to provide experiences that will make it easier to understand the mechanisms that are at work with cookie technology. People can then decide for themselves how they want to act upon that information.

Embodiment/visualization

By acting out in a performance the operations that a computer system does or by visualizing these operations on a computer screen the audience gets an image of what the computer is doing which would otherwise be obscured from view. This allows for the audience to respond to the actions that the computer is taking silently on behalf of the programmers or the persons paying them.

In my project Performance 1 & 2 in combination with Website 1, parts of Workshop 1 and Software 2 together with Website 3 are embodying and visualizing cookie technology.

Tools

When creating software or hardware a designer wants his users to engage with the system in a certain way to accomplish certain goals. These goals may not be in line with an users best interest in some cases. Functionality may be missing for instance. I offer alternative tools that allow the users to interact with a computer system in a different way that hopefully provides in a need to make the computer do what the user wants it to do, instead of making the user do what a designer wants the user to do.

Making the computer work for you instead of you working for the computer are the goals for the tools Hardware 1, Workshop 1 and Software 1.

Technical realization

Performances

The first performance doesn't require anything special. I want to film the performance, which I may do with a good camera from the institute, my descent home video recorder or my Nokia N8.

For the second performance I'll probably need to use the green screen studio and After FX as a video tool to get the results I'm aiming for.

Websites

To achieve the kind of interaction between video and website that I want for Website 1 I'll need PopcornJS or Flowplayer. The big advantage of Flowplayer is that it works in older browsers and offers much more functionality then I think I need at the moment. PopcornJS on the other hand is open source and completely HTML5, for which I have a strong sympathy and which may be the stuff of the future. It also has free integration with Youtube which may come in handy.

Website 2 is a tricky one. I can use the Rainbow plugin, another Mozilla HTML5 technology, to record video and audio through the users webcam, but Rainbow isn't supported for Linux, which means Mac and Windows only! I could also use the SkypeAPI and allow people to call me and record a message there, but this solution is dirty and requires a desktop to stay online all the time. Another way is to do manual recordings and just ask people from the street to shout for their money. I can also imagine a combination between manual and automated recordings.

I never realized something like Website 3, but there are webpages that exactly know which

cookies are present. The cookies need to be readable by all websites in order for the system to work anyway. It will be a matter of getting my hands on the code and tweaking it for my purposes. Hopefully some of that code will be available and not too difficult to understand and change.

Website 4 will be a fairly straightforward website. It needs a good interface for people to browse the information, but this is not a technical challenge. If I want it to interact with the EU database of law this will be an extra technical dimension to it, but it shouldn't be very hard.

Hardware

At the moment I think I want to use an internet hub and install Privoxy on it for Hardware 1. The configuration files of Privoxy should be editable and then I can change which cookies are allowed and which aren't. I think I read somewhere that Privoxy will auto load new configuration files so I don't have to worry about starting up Privoxy whenever the files are changed. Probably I'll use some Python and Bash to change the configuration files automatically.

I was thinking of hiding the hub inside a Cookie Monster doll and change the eyes into displays that will show how much money you made so far. I have to talk to Stock in order to see how plausible it is to connect simple displays to a hub and whether the operating system on that hub will be able to communicate with the displays.

Software

Software 1 should work together with Hardware 1. In fact Software 1 is the software that should trigger the rewriting of the configuration files in the software of Hardware 1. This should not be very hard to do, but the challenge is to make the software scalable and distributed while at the same time save, because we don't want that online advertisers can hack their way into approval! If we don't make it distributed, but decentralized it shouldn't be very hard to keep it secure and scalable, yet at the same time it may be costly to get a lot of hosting and the network would lean on my shoulders.

I've written software in Python and Openframeworks that could do the job that Software 2 is supposed to be doing. However this is not a good solution because it won't run easily and certainly isn't something out of the box. Alternatively I could make similar functionality using Processing 2.0 since that is almost as fast as Openframeworks, but this hasn't been released yet (it would be a great Christmas present). Processing 2.0 should be able to run in the browser, but I could try to circumvent Processing 2.0 and just build a website with PopcornJS and maybe other HTML5 Javascript libraries.

Related artworks

Ghostery, Adblock Plus, Cookie Monster

These are not artworks but tools that can help a user to get rid of cookie technology in some way. Ghostery is suited most for protection against tracking technology, but doesn't only do it by interfering on a cookie level. Ad Blockplus hides the commercials that you may get through cookie technology, but doesn't stop the tracking in any way. Cookie Monster is specifically designed to add a cookie management system to Firefox, which doesn't have that by default. My project differs from these projects since I want the user to make money by selling his or her cookies in a collective.

Webpages giving browser profile

This is also not an artwork. Some webpages can show a lot of information about your specific browser. Which cookies are installed is part of this profile. In a similar way I want to detect cookies to visualize them in an artistic way.

Artvertizer

Is an artwork that uses augmented reality to swap commercials in real life with artwork. It is a little bit like Adblock Plus for the real world. I'm inspired by this work since I'm planning to swap commercials with something else as well. In my case that would be a call to stop allowing cookies for free.

Cookies performance

In this performance visitors to a museum would secretly get cookies inside their pockets "given" by the performers. To me this is the embodiment of what cookie technology is partly about. You get something which you haven't asked for and that can be an unpleasant surprise. I think it's too bad I didn't think of this one myself.

Turning Google, FB resistance, Ball over webpage

These artworks are changing the well known icons of Facebook and Google in a similar manner as I want to change Youtube. Turning Google is a "normal" Google search engine, but it turns around slightly each second until it has turned completely. I can remember the amazement I got from this piece, because something so familiar was suddenly so different. FB resistance is an artwork that allows you to change your Facebook pages. Instead of the blue and white layout you can give a rainbow pattern as background for instance. Ball over webpage is a website where a virtual ball is moving over your website and slightly turns and twists everything the ball rolls over.

Popcorn example

There is a PopcornJS example that not only changes the website like I'm planning to do with my own version of Youtube. It also expresses a marxist ideology.

Google will eat itself, BetterTheWorld.com (ideological internet), Search engines

Google will eat itself is a project whereby revenue that is generated through ad placement is used to by Google stock. BetterTheWorld.com uses income generated in a similar way to support charity. The same goes for the search engines that make money through cookies with a good purpose in mind. I would love that the money generated by the union to get a good destination.

Me lost me cookie at the disco, Change the World

These are video clips that are made by Sesamestreet. Me lost me cookie at the disco is featuring the one and only cookie monster. I'm not sure what I want with this inspiration. It could be that I try to copy the aesthetics of it. I also may only try to copy the Cookie Monsters gestures and voice to use it in a totally different setting.

Thimbl

Thimbl is an alternative to Twitter that is setup by the Telecommunisten. In a way I also want to build a system that promotes equality like this system is doing.

World view

I strongly believe in evolutionary psychology and evolutionary anthropology. In these discourses scientist try to explain human behavior and culture from the idea that we came into being through evolution. One of the consequences for this idea is that our environment is changing rapidly together with some of our behaviors and culture, but that the vehicle for behavior and culture (our body) can adjust only slowly to this new environment. Because the body is lacking behind some of our behavior

and culture can't keep up with the changing environment. An example of evolutionary psychology is the following reasoning.

In prehistoric times it was hard to get sugar, there were only a few resources through which men could get sugar and a lot of organisms were competing for it. Since sugar is beneficial to us, people who urged sugar strongly and therefore ate sugar with some regularity would reproduce more than people who didn't. This way, scientists argue, the whole of humanity slowly developed a strong urge for sugar, because the genes for this urge was passed on to next generations often. However as we started to change our environment it became more and more easy to get sugar, up to the point that we can get it in every corner shop. It is thought that our urge for sugar has not changed together with the environment and that as a result of that we now eat too much sugar, since we are urging for it as if sugar is rare.

I'm convinced that in a similar manner technology is ahead of our body to cope with it effectively. This can result into problems which I want to address.

Thesis

In my thesis I want to explore the notion of “free”. What does it mean to get something for free in our society? What different kinds of free can be distinguished and what is said about them?

It's not my intention to go into anything that is not economy related like “a free world” or “freedom of speech”. I'm interested in the economic notion of free because my project aims to get money for something which is at the moment taken freely. To truly stand behind my project I need to know exactly what it means to ask money for that which companies use for free. You could say that we get all kinds of services in return for the hard disk space that we supply, but then I do want to find out how this relates to the enormous surplus value that these companies make and how stock holders fit into the equation.

I want to look at this topic from different angles. People who are in favor of free as well as people who think we are working for nothing and their reasons for thinking that way are going to be addressed in the thesis. I also want to explore how altruism and doing something for free relate to each other as well as how free can be understood from an evolutionary economy point of view.

Bibliography

- “Free” Chris Anderson
- “Immaterial labor” Lazzarato
- “Perform or Else” ?
- “Reality TV” ?
- “Google Analytics” Justin Cutroni
- “Viral Loop” Adam Penenberg
- “Request for Comments: 2965” Kristol, D and Montulli, L. (2000)
- “The Telekommunist Manifesto” Dymitri Kleiner
-

Time line

Evaluation

